

## REMARKS

This amendment is submitted in response to the final Office Action mailed on February 18, 2005. Claims 1-26 are pending in this application. In the Office Action, Claims 1-4, 6-11, 13-19 and 21-26 are rejected under 35 U.S.C. §102 and Claims 5 and 7-26 are rejected under 35 U.S.C. §103. In response Claims 1, 7, 14-16 and 21-26 have been amended. This amendment does not add new matter. In view of the amendments and/or for the response set forth below, Applicants respectfully submit that the rejections should be withdrawn.

In the Office Action, Claims 1-4, 6-10, 13-19 and 21-26 are rejected under 35 U.S.C. §102(b) as anticipated by EP 0850569 to Ballevre et al. ("*Ballevre*"). Claims 1-4, 6-10, 13-19 and 21-26 are rejected under 35 U.S.C. §102(e) as anticipated by WO 99/22604 to Fone ("*Fone*"). Claims 1, 3, 7-8, 11, 13-19 and 22 are rejected under 35 U.S.C. §102(b) as anticipated by EP 0862863 to Cavadini et al. ("*Cavadini*"). Claims 1-4, 6-10, 13-19 and 21-26 are rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,776,524 to Reinhart ("*Reinhart*"). Applicants respectfully disagree with and traverse these rejections for at least the reasons set forth below.

Applicants have amended independent Claims 1, 7, 14-16 and 21-26 to include, in part, the step of administering to pets in need of improved physical activity/energy or having joint stiffness a pet food composition to improve same. The amendments as discussed above are fully supported in the specification. In contrast, *Ballevre*, *Fone*, *Cavadini* and *Reinhart* fail to disclose or suggest a number of elements of the present claims. For example, *Ballevre*, *Fone*, *Cavadini* and *Reinhart* clearly fail to disclose or arguably suggest the step of administering to pets in need of improved physical activity/energy or having joint stiffness a pet food composition to improve same. In addition, contrary to the Patent Office's position, nowhere does the cited art disclose or suggest Applicants' novel discovery of the link between improving activity in a pet by promoting the growth of bifido- and lactic-bacteria in the gastro-intestinal tract of the pet using nutritional agents, for example, such as inulin or prebiotics as required by the present claims. Further deficiencies of the cited references are discussed below.

Regarding *Ballevre*, the Patent Office alleges that *Ballevre* teaches a pet food containing inulin and teaches the growth of lactic and bifido-bacteria at the cost of pathogenic bacteria and that the method prevents and treats diarrhea, increases growth, improves the ability to breed and

enhances health. The Patent Office further alleges that the enhancement of health inherently would increase pet activity. See, Office Action, page 2.

Applicants respectfully disagree with this inherency argument and submit that enhanced health does not inherently increase the activity of a pet. To satisfy the test for inherency an increase in pet activity would necessarily (i.e. always or automatically) have to follow from an improvement in pet health. That condition simply is not met under the present circumstances. For example, a pet may be a normal active pet or even an anxious pet that is overly active. While such a pet could benefit from improved health by consuming the pet food of *Ballevre*, it would not necessarily follow that such a pet would have improved activity according to Applicants present claims as required for inherency. Also, a pet may ingest the pet food of *Ballevre* and may benefit from improved health but not to such an extent that the activity of the pet is improved as would be required for inherency. Thus, it cannot be said that improved health would inherently improve the activity of a pet. For this reason Applicant submits that independent Claims 1, 7, 14, 15, 16, 21, 22, 23, 24, 25 and 26 are novel over *Ballevre*, which fails to disclose either literally or inherently improving elderly pet activity (Claims 1, 7, 14, 15, 21, 23, 24, 25), ameliorating joint stiffness (Claim 16), providing the pet with more energy (Claim 22) or returning a pet to a previous level of liveliness (Claim 26) in accordance with the present claims.

Regarding *Fone*, the Patent Office alleges that *Fone* teaches a pet food containing chicory, which is said to promote the growth of beneficial colonic bacteria. The Patent Office indicates that the application teaches that this has a beneficial effect on the pet's overall health. The Patent Office indicated that the enhancement of health inherently would increase pet activity.

Applicants respectfully submit that the beneficial effect in *Fone* is limited to a beneficial effect on colonic health, rather than overall health as indicated in the Office action. Nevertheless, as Applicants discussed previously, improved pet activity is not inherent in an improvement in overall health, much less colonic health. Thus, independent Claims 1, 7, 14, 15, 16, 21, 22, 23, 24, 25 and 26 are novel over *Fone* which fails to disclose either literally or inherently improving pet activity (Claims 1, 7, 14, 15, 21, 23, 24, 25), ameliorating joint stiffness (Claim 16),

providing the pet with more energy (Claim 22) or returning a pet to a previous level of liveliness (Claim 26).

Regarding *Cavadini*, the Patent Office alleges that *Cavadini* teaches that probiotics are beneficial for gastrointestinal tract health in pets by inhibiting the growth of pathogenic bacteria which produce toxic amine compounds. In addition, the Patent Office alleges that *Cavadini* teaches that probiotic microorganisms activate the immune function of the host. Further, the Patent Office takes the position that the passage disclosing “a ready-to-eat cereal product to provide a daily amount of about  $10^6$  to about  $10^{12}$  cells of probiotic micro-organisms” equates with the limitations in Claim 11. The Patent Office states that improving GI tract health, inhibiting growth and activity of pathogenic bacteria and activating the immune function of a pet would inherently increase pet activity.

Applicants respectfully disagree. First, *Cavadini* is primarily directed to GI health and maintenance of a healthy colonic flora. Although GI tract health may be a component of good health, it is not an inherent disclosure of increased pet activity. As Applicants point out above, even a normal active pet or an anxious pet that is overly active may benefit from improved GI tract health by consuming the pet food of *Cavadini* and not have improved activity as required for inherency. Also, a pet may ingest the pet food of the *Cavadini* and may benefit from improved health but not to such an extent that the activity of the pet is improved. Thus, independent Claims 1, 7, 14, 15, 16, 22, are novel over *Cavadini* which fails to disclose either literally or inherently increasing pet activity (Claims 1, 7, 14, 15), ameliorating joint stiffness (Claim 16), or increasing energy (Claim 22).

With respect to Claim 11, the disclosure at Page 5, line 58 does not disclose a pet food that contains about  $10^4$  to about  $10^{10}$  cells of probiotic micro-organism per gram or any particular amount of probiotic organism in a pet food. Rather, the disclosure in *Cavadini* is directed to the daily amount of probiotic bacteria to be ingested by an animal or human. Thus, Applicant submits that Claim 11 is novel over the recited disclosure at page 5 line 58 and also for the reasons that its base Claim 7 is allowable.

Regarding *Reinhart*, the Patent Office alleges that *Reinhart* teaches feeding pets 0.2-1 wt% of inulin in a diet that includes corn to reduce pathogenic bacteria and thereby improve GI tract health. Again, the Patent Office relies on inherency in finding anticipation.

Applicant respectfully disagrees with the position taken by Patent Office that *Reinhart* anticipates the present claims. Applicant submits that *Reinhart* fails to literally disclose that administering to a pet a nutritional agent to improve the activity in a pet. As indicated above improved GI tract health is not an inherent disclosure of improved pet activity. Thus, independent Claims 1, 7, 14, 15, 16, 21, 22, 23, 24, 25 and 26 are novel over *Reinhart*, which fails to disclose either literally or inherently improving pet activity (Claims 1, 7, 14, 15, 21, 23, 24, 25), ameliorating joint stiffness (Claim 16), providing the pet with more energy (Claim 22) or returning a pet to a previous level of liveliness (Claim 26).

Accordingly, Applicants respectfully request that the rejections of Claims 1-4, 6-11, 13-19 and 21-26 under 35 U.S.C. §102 be withdrawn.

In the Office Action, Claims 5 and 7-26 are rejected under 35 U.S.C. §103 as being unpatentable over *Fone*, *Ballevre*, and *Reinhart* in view of *Cavadini*, U.S. Patent No. 6,156,355 to Shields et al. (“*Shields*”) and Lowe (*Canine Nutrition*, Biotechnology in Feed Industry, pages 275-287, 1988) and in further view of U.S. Patent No. 6,596,303 to Bui et al. (“*Bui*”) and U.S. Patent No. 5,709,855 to Bockow (“*Bockow*”). Applicants believe these rejections are improper and respectfully traverse them for at least the reasons set forth below.

Applicants reiterate that none of the recited primary references literally or inherently disclose or suggest, in part, the step of administering to an elderly pet in need of improved activity a nutritional agent that promotes the growth of bifido and lactic bacteria in the gastrointestinal tract of the pet to improve activity/energy levels in the elderly pet as required by the present claims. Moreover, improved activity of the pet is simply not inherent in improved health, nor improved GI tract health, nor improved immune function, nor reduced pathogenic activity, whether in an old dog or in an active healthy pet as is allegedly disclosed in the cited references.

Further, Applicants do not believe that the remaining cited art can be relied on, solely, to remedy the deficiencies of the primary cited references. Indeed, the Patent Office merely relies on the *Bui* and *Bockow* references for their alleged teachings regarding that fatty acids are beneficial. See, Office Action, page 6. Moreover, the Patent Office merely relies on the *Lowe* reference for its alleged teaching that a reduced efficiency of the digestive tract can occur as a result of age and infection. *Cavadini* is relied upon as disclosing that probiotic bacteria aid in

reducing pathogenic bacteria and that probiotic bacteria activate immune function. Nevertheless, *Bui*, *Bockow*, *Cavadini* and *Lowe* are deficient with respect to the present claims, like the primary references, for failing to disclose or suggest the step of administering to an elderly pet in need of improved activity a nutritional agent that promotes the growth of bifido and lactic bacteria in the gastro-intestinal tract of the pet to improve activity/energy levels in the elderly pet as required by the present claims.

Further, Applicants do not believe that the *Shields* reference can be relied on to remedy the deficiencies of the other cited references. Indeed, the *Shields* reference merely provides various dietary options that are tailored to different working dog activities and breeds. As set forth in column 4 of *Shields*, for example, diets with different percentages of fat calories are intended for different applications. Thus, the emphasis of *Shields* is on using energy content as a way to influence the work output of the different dogs. This is clearly different from the claimed methods of increasing overall physical activity levels of elderly pets by addressing gut health.

Moreover, Applicants question why the Patent Office would combine *Shields* with any of the other cited references in the first place. Indeed, in *Shields*, energy management is achieved through control of calorie intake by diet formulation as discussed above. Thus, there is no suggestion that the selective promotion of desirable bacterial colonization in the gastro-intestinal tract can lead to a pet that exhibits enhanced activity levels.

For example, the “Herding formula” of *Shields* provides “a high energy level without excessive use of fat.” See, *Shields*, column 11, lines 14-15. This energy level provides calories for the pet to burn in its working activities. However, this has effectively nothing to do with the prebiotics in the formula which are included to stop diarrhea. See, *Shields*, column 11, lines 25-52. Thus, *Shields* provides no suggestion that it can or should be used to improve generally the activity level of a pet.

Even the “Non-Sporting formula” that is designed to provide “moderate energy,” includes chicory extract, namely inulin. See, *Shields*, column 9, line 63 to column 10, line 5. This demonstrates that the inclusion of chicory has effectively no impact on the enhancement of activity levels of the dogs concerned, contrary to the Patent Office’s position. Based on at least these reasons, the *Shields* reference is clearly deficient with respect to the present claims.

The Patent Office further contends that the benefits shown for all dogs would extend to benefit elderly dogs. See, Office Action, page 6. However, if an elderly pet is presented with diminished capacity for movement, it is not apparent that administering a composition formulated with known aids for improving gastro-intestinal function, such as digestion, will result in regained activity/energy levels as required by the present claims. Likewise, no link has been established in the cited references between gut health and joint inflammation or stiffness. In general, veterinarians and the like do not administer gut health supplements as a way to improve activity or decrease joint stiffness in elderly pets. As is well known, the causes of elderly pet inactivity are different from those in younger pets. Thus, Applicants do not believe that the Patent Office can rely on this general conclusion in support of the obviousness rejection without further support.

Applicants also contest the Patent Office's assertion on page 6 of the Office Action that concluded with "and hence an increase in pet activity for such elder pets." In this regard, no link has been established in any of the cited references between immune function and physical activity levels. Further, no link has been established in the cited references between gut health and joint inflammation or stiffness as discussed above. In general, veterinarians and the like do not administer immune stimulators or gut health supplements as a way to improve activity or decrease joint stiffness in elderly pets. Thus, Applicants do not believe that the Patent Office can rely on this general conclusion in support of the obviousness rejection.

In sum, there is nothing in any of the cited references to suggest or provide any incentive, absent impermissible hindsight gleaned from the present application, to one of ordinary skill in the art to feed elderly pets in need of improved activity/energy levels the diet of the present claims to improve the activity in an elderly pet because the primary end points of the feeding regimen of the cited references are aspects of animal health other than pet activity/energy. In fact, generally using improved health as an end point one of skill could cause one of skill to stop feeding the diet to a pet prior to the time that an improvement in the activity of a pet occurs. For the reasons discussed above, the combination of *Fone*, *Ballevre* and *Reinhart* in view of *Shields*, *Lowe*, *Bui* and *Bockow* does not teach, suggest, or even disclose the present claims, and thus, fails to render the claimed subject matter obvious for at least these reasons.

Accordingly, Applicants respectfully request that the obviousness rejections with respect to Claims 5 and 7-26 be reconsidered and the rejections be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same.

Respectfully submitted,

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